

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

RECEIVED  
CENTRAL FAX CENTER

SEP 20 2006

Remarks/Arguments:

Reconsideration of the application is requested.

Claims 1 and 3-5 remain in the application. Claim 2 was previously cancelled.

In item 4 on page 2 of the above-identified Office action, claim 5 has been rejected as failing to comply with the written description requirement under 35 U.S.C. § 112.

The Examiner stated that the limitation of "a portion" is considered new matter. Applicant respectfully disagrees with the Examiner. More specifically, claim 5 as originally filed recited a "significant portion". While a "portion" may be broader than a "significant portion", it is nevertheless, disclosed by a "significant portion". Accordingly, now new matter has been added. Therefore, claim 5 has not been amended to overcome the rejection.

In item 5 on page 3 of the above-identified Office action, claim 5 has been rejected as being indefinite under 35 U.S.C. § 112.

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

More specifically, the Examiner alleges that that the term "portion" is a relative term, which renders the claim indefinite. Applicant respectfully disagrees. More specifically, the term "portion" is not a relative term. It is noted that the definition of portion from Webster's New World Dictionary is: a part. Accordingly, the claim recites that a part of the tube is embedded, which is not a relative term. As noted above, while the term "portion" may be broader than a "significant portion" it is not a relative term. Therefore, claim 5 has not been amended to overcome the rejection.

The Examiner alleges that claim 1 is vague and indefinite and incomplete in what all is meant by and encompassed by the phrase "said condensation tube being formed with an elbow leading into an outlet". Applicants respectfully disagree with the Examiner. More specifically as seen from Fig. 2 the tube 28 has an elbow 28c, which leads into an outlet nozzle 28d. Accordingly, it is believed that claim 1 meets the requirements of 35 U.S.C. §112, second paragraph. Therefore, claim 1 has not been amended to overcome the rejection. If the Examiner still disagrees, it is kindly requested that the Examiner discuss the rejection with the Examiner's supervisor.

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, second paragraph. Should the Examiner find any further objectionable items, counsel would appreciate a telephone call during which the matter may be resolved.

In item 6 on page 4 of the Office action, claims 1 and 3 have been rejected as being fully anticipated by Kobayashi et al. (U.S. Patent No. 4,036,291) (hereinafter "Kobayashi") under 35 U.S.C. § 102.

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, *inter alia*:

a vertical condensation tube having an upper end communicating with the pressure chamber and a lower end immersed in the cooling liquid in the condensation chamber.

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

Applicants respectfully note that the instant application specifies the interconnection of individual rooms or chambers of a nuclear power plant. In this context, it is important that for a proper definition of the subject matter of the invention, that the respective chambers or rooms are suitably defined and identified with respect to their precise function and the nomenclature customary among those skilled in the art. In particular, the condensation chamber recited in claim 1 of the instant application, is not just a random chamber within the reactor building, instead, as is well known to a person of ordinary skill in the art, the condensation chamber is a very specific chamber constructed to perform a particular function. It is respectfully noted that it appears that the Examiner has ignored this fact with respect to the discussion of the Kobayashi reference, which appears to have led to a fundamental misinterpretation of the Kobayashi reference by the Examiner.

In the instant application, the condensation chamber 8 is a chamber of the nuclear power plant, in which, in the case of an abnormal occurrence, a condensation of steam generated as a consequence of the abnormal occurrence is supposed to take place in the interior of the containment. This fact can be obtained, on the one hand, from the designation of a "condensation chamber" used by those skilled in the art and

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

also from the passages of the specification of the instant application. Therefore, the condensation chamber is constructed and, with regard to fluid engineering, connected with the pressure chamber of the nuclear plant, such that in the case of steam generating in the pressure region of the reactor and consequently the increase in pressure connected therewith a large amount of steam can overflow from the pressure chamber into the condensation chamber. During such an abnormal occurrence, the overflowing steam is specifically led into the cooling medium present in the condensation chamber, wherein the steam is cooled and consequently condensed. As a result of the condensation, this leads to a decrease in pressure in the overall system, so that impermissible increases in pressure in the pressure chamber of the nuclear plant can be avoided as a consequence of increasing steam. This function and the construction of the condensation chamber 8 are explained in the specification of the instant application.

With regard to its structure, the condensation chamber 8 of the present invention is defined by a device, which, if required, permits an overflowing of generated steam from the pressure chamber 6 into the condensation chamber 8 in as fast a manner as possible. The condensation chamber 8 is therefore connected with the pressure chamber 6 of the nuclear plant via

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

the condensation pipe 28. It is also important for the proper functioning mode of the condensation chamber 8 that the condensation chamber is decoupled from the flood tank 10 and the pressure chamber 6 with regard to pressure technology. Accordingly, when the pressure increases in the pressure chamber 6, an overflowing of steam into the condensation chamber 8 does occur via the condensation pipe 28 without the possibility of a pressure compensation occurring in other ways. For example, between the flood tank 10 and the pressure chamber 6, on one hand, and the condensation chamber 8, on the other hand.

The Kobayashi reference discloses a system that does not refer to applications in the nuclear field, but instead, Kobayashi discloses cooling systems for electronic components.

Kobayashi does not disclose problems or aspects in connection with the condensation of steam in abnormal occurrences.

Especially with regard to the fact, that the concepts disclosed in the instant application for treating steam portions are specific safety concepts with very typical boundary conditions (constraints).

As seen from the above given comments, the Kobayashi reference does not show a vertical condensation tube having an upper end communicating with the pressure chamber and a lower end

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

immersed in the cooling liquid in the condensation chamber, as recited in claim 1 of the instant application.

In item 7 on page 6 of the Office action, claims 1 and 5 have been rejected as being unpatentable over Krebs Fig. 4 in view of Garabedian (US 4,986,956) under 35 U.S.C. § 103(a).

Claim 1 also calls for, *inter alia*:

the lower end of the condensation tube being formed with an elbow leading into an outlet nozzle and the outlet nozzle of the condensation tube being formed by a tube section having a lower side proximal to the base of the condensation chamber and an upper side distal from the base, and the lower side being longer than the upper side.

In the first paragraph on page 8 of the Office action, the Examiner correctly stated that Krebs does not disclose the specific geometry of the outlet nozzle.

Applicants respectfully disagree with the Examiner's allegation in the third paragraph on page 8 of the Office action, that "it would have been obvious to one of ordinary skill in the art to modify the outlet nozzle of Krebs with a

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

45 degree angle thereby providing an outlet nozzle formed with a lower side longer than the upper side."

While the Garabedian reference may disclose outlet nozzles with slanted outlet surfaces, where pulsed pressure or the like, generated by exiting steam are to be eliminated. It is pointed out that the slanted construction of the nozzle according to Garabedian is specifically configured to the geometries disclosed in Garabedian and to the media treated therein. In Garabedian, the elimination of pressure disturbances or the like by the slanted construction disclosed therein principally only plays a role in the specific type of steam inlet disclosed therein. That being a steam inlet in which the steam inlet occurs by overflow pipes that are directed downward. Garabedian explicitly discloses this, in particular because the system parameters disclosed therein are configured to the precise geometry of the overflow pipes disclosed therein.

Therefore, it is applicant's position that Garabedian discloses, to a person of ordinary skill in the art, that the overflow geometry provided therein is configured specifically for the respective system, where the respective system dynamic is critically dependent upon the geometries of the components used in the system. Accordingly, they cannot be transferred



Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

to different systems. Therefore, there is no motivation for a person of ordinary skill in the art to use the types of the outlet openings disclosed by Garabedian for use in different systems, in which a different flow guidance of the overflow pieces is provided. Contrary to the Examiner's allegation, applicant particularly and absolutely believes that the pressure fluctuations and pulse, which are problematic for the system according to the reference Garabedian, occur only as a result of the overflow lines being directed vertically downward. They would not play a role in an alternative system, such as for example the system disclosed in Krebs. Therefore, there is no motivation for a person of ordinary skill in the art to modify Krebs based on the disclosure of Garabedian.

Moreover, the result achieved by the present invention, i.e. the inlet of steam particularly low in turbulences into the condensation chamber, can exactly be achieved by the construction of the outlet nozzle in relation to the elbow piece connected upstream thereof. In other words, it is exactly the combination of these two elements, which guarantees the desired results of a particularly good-natured inlet of the steam into the condensation fluid. Disclosure of such a behavior intentionally induced by the geometry suitably chosen during the overflowing of the steam cannot is not

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

provided in Garabedian or Krebs individually or in a combination thereof.

Moreover, it is well settled that almost all claimed inventions are but novel combinations of old features. The courts have held in this context, however, that when "it is necessary to select elements of various teachings in order to form the claimed invention, we ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the applicant". Interconnect Planning Corp. v. Feil, 227 USPQ 543, 551 (Fed. Cir. 1985) (emphasis added). "Obviousness can not be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion or incentive supporting the combination". In re Bond, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990). "Under Section 103 teachings of references can be combined only if there is some suggestion or incentive to do so." ACS Hospital Systems, Inc. v. Montefiore Hospital et al., 221 USPQ 929, 933, 732 F.2d 1572 (Fed. Cir. 1984) (emphasis original). "Although a reference need not expressly teach that the disclosure contained therein should be combined with another, the showing of combinability, in whatever form, must nevertheless be 'clear and particular.'" Winner Int'l Royalty Corp. v. Wang, 53 USPQ2d 1580, 1587, 202 F.3d 1340 (Fed. Cir. 2000) (emphasis added; citations omitted); Brown & Williamson

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

Tobacco Corp. v. Philip Morris, Inc., 56 USPQ2d 1456, 1459  
(Fed. Cir. Oct. 17, 2000). Applicants believe that there is no "clear and particular" teaching or suggestion in Krebs to incorporate the features of Garabedian, and there is no teaching or suggestion in Garabedian to incorporate the features of Krebs.

In establishing a *prima facie* case of obviousness, it is incumbent upon the Examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion, or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the *applicant's/appellant's* disclosure. See, for example, Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir. 1988), *cert. den.*, 488 U.S. 825 (1988). The Examiner has not provided the requisite reason why one of ordinary skill in the art would have been led to modify Krebs or Garabedian or to combine Krebs's and Garabedian's teachings to arrive at the claimed present invention. Further, the Examiner has not shown the requisite motivation from some teaching, suggestion, or inference in

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

Krebs or Garabedian or from knowledge available to those skilled in the art.

Applicants respectfully believe that any teaching, suggestion, or incentive possibly derived from the prior art is only present with hindsight judgment in view of the instant application. "It is impermissible, however, simply to engage in a hindsight reconstruction of the claimed invention, using the applicant's structure as a template and selecting elements from references to fill the gaps. . . . The references themselves must provide some teaching whereby the applicant's combination would have been obvious." In re Gorman, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (emphasis added). Here, no such teaching is present in the cited references.

Accordingly, the references do not show or suggest the lower end of the condensation tube being formed with an elbow leading into an outlet nozzle and the outlet nozzle of the condensation tube being formed by a tube section having a lower side proximal to the base of the condensation chamber and an upper side distal from the base, and the lower side being longer than the upper side, as recited in claim 1 of the instant application.

Applic. No. 10/727,753

Amdt. dated September 20, 2006

Reply to Office action of June 20, 2006

In item 8 on pages 8 of the Office action, claims 3 and 4 have been rejected as being unpatentable over Krebs Fig. 4 in view of Garabedian and further in view of either John et al.

("Introduction to Fluid Mechanics," Second Edition)

(hereinafter "John") or Nayyer ("Piping Handbook," Seventh Edition) under 35 U.S.C. § 103(a). Neither John nor Nayyer make up for the deficiencies of Krebs and Garabedian. Since claim 1 is believed to be allowable, dependent claims 3 and 4 are believed to be allowable as well.

In item 9 on page 10 of the Office action, claims 3 and 4 have been rejected as being obvious over Kobayashi (U.S. Patent No. 4,036,291) in view of either John ("Introduction to Fluid Mechanics," Second Edition) or Nayyer ("Piping Handbook," Seventh Edition) under 35 U.S.C. § 103. Neither John nor Nayyer make up for the deficiencies of Kobayashi. Since claim 1 is believed to be allowable, dependent claims 3 and 4 are believed to be allowable as well.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

Applic. No. 10/727,753  
Amdt. dated September 20, 2006  
Reply to Office action of June 20, 2006

RECEIVED  
CENTRAL FAX CENTER

SEP 20 2006

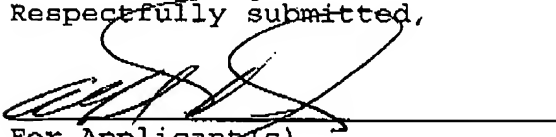
In view of the foregoing, reconsideration and allowance of  
claims 1 and 3-5 are solicited.

In the event the Examiner should still find any of the claims  
to be unpatentable, counsel respectfully requests a telephone  
call so that, if possible, patentable language can be worked  
out.

If an extension of time for this paper is required, petition  
for extension is herewith made.

Please charge any other fees which might be due with respect  
to Sections 1.16 and 1.17 to the Deposit Account of Lerner  
Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

  
For Applicant(s)

Alfred K. Dassler  
52,794

AKD:cgm

September 20, 2006

Lerner Greenberg Stemer LLP  
Post Office Box 2480  
Hollywood, FL 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101